

# AUTOMOBILE LOANS – WHAT DO I NEED TO KNOW?

	Total Points Earned
30	Total Points Possible
	Percentage

Name\_\_\_\_\_

Date\_\_\_\_\_

Class\_\_\_\_\_

Directions: Complete the following questions during the PowerPoint presentation.

1. What are the first and second most expensive purchases for consumers? (2 points)
2. What is a common way for consumers to purchase automobiles? (1 point)
3. Is it less expensive in the long run to purchase an automobile with cash or take out a loan? (1 point)
4. Name at least three items which can affect credit rating. (3 points)
5. What is a cosigner? What happens to a cosigner if the original borrower does not make the payments? (1 point)
6. What is a lender? Name at least four lender options. (4 points)
7. What consumer rights act requires clear disclosure of key terms and all costs in lending agreements? (1 point)
8. Name two items lenders are required by law to disclose to consumers. (2 points)
9. Define negotiated price. (1 point)

10. What is usually required to purchase an automobile and paid at the time of purchase? (1 point)
11. What variable is dependent on the down payment and/or trade-in? (1 point)
12. Define the Annual Percentage Rate (APR). (1 point)
13. What measure is the time period of an auto loan usually expressed? (1 point)
14. Define total cost of the loan. (1 point)
15. Define total purchasing cost. (1 point)
16. The larger the down payment on an automobile, the \_\_\_\_\_ the principal loan amount.  
(1 point)
17. The \_\_\_\_\_ the time period of the loan, the smaller the payments, but more \_\_\_\_\_ is paid. (2 points)
18. The \_\_\_\_\_ the APR, the more interest is paid and the \_\_\_\_\_ the total loan amount. (2 points)
19. List the three variables needed to calculate the cost of a loan. (3 points)

# CALCULATING THE COST OF A LOAN

	Total Points Earned
24	Total Points Possible
	Percentage

Name \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_

**Directions:** To practice calculating the costs involved with an automobile loan, calculate and record the principal loan amount, monthly payment, interest paid, and total purchasing cost for each example below.

**Changing the Down Payment:** \$7,500 negotiated price, 8% APR compounded monthly, 3 years

1. Example #1 – \$1,000 down payment (4 points)

Principal loan amount: _____	Interest paid: _____
Monthly payment: _____	Total purchasing cost: _____
Total Loan Amount: _____	

2. Example #2 - \$2,500 down payment (4 points)

Principal loan amount: _____	Interest paid: _____
Monthly payment: _____	Total purchasing cost: _____
Total Loan Amount: _____	

**Changing the APR:** \$7,500 negotiated price, \$2,500 down payment, 3 years

3. Example #3 - 8% APR compounded monthly (4 points)

Principal loan amount: _____	Interest paid: _____
Monthly payment: _____	Total purchasing cost: _____
Total Loan Amount: _____	

4. Example #4 - 10% APR (4 points)

Principal loan amount: _____	Interest paid: _____
Monthly payment: _____	Total purchasing cost: _____
Total Loan Amount: _____	

**Changing the Time Period:** \$7,500 negotiated price, \$2,500 down payment, 8%APR compounded monthly

5. Example #5 – 3 years (4 points)

Principal loan amount: _____	Interest paid: _____
Monthly payment: _____	Total purchasing cost: _____
Total Loan Amount: _____	

6. Example #6 – 5 years (4 points)

Principal loan amount: _____	Interest paid: _____
Monthly payment: _____	Total purchasing cost: _____
Total Loan Amount: _____	

# SHOPPING FOR AN AUTOMOBILE LOAN USING FINANCIAL CALCULATORS

	Total Points Earned
12	Total Points Possible (1 point per cell)
	Percentage

Name \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_

**Directions:** Calculate and complete the empty spaces labeled with letters in the tables below to compare different loan options by using a financial calculator (BAII Plus).

## 3-year New Car Loan

	# of Payments per Year	Principal Loan Amount	APR	Time Period	Monthly Payment	Interest Paid	Total Loan Amount
#1	12	\$15,000	3.99%	3 years	A.	\$940.55	B.
#2	12	\$15,000	7.75%	3 years	\$468.32	C.	D.

## 5-year New Car Loan

	# of Payments per Year	Principal Loan Amount	APR	Time Period	Monthly Payment	Interest Paid	Total Loan Amount
#1	12	\$25,000	4.49%	5 years	E.	F.	\$27,957.71
#2	12	\$25,000	6.50%	5 years	\$489.15	G.	H.

## 3-year Used Car Loan

	# of Payments per Year	Principal Loan Amount	APR	Time Period	Monthly Payment	Interest Paid	Total Loan Amount
#1	12	\$7,500	6.75% (.0675)	3 years	I.	J.	\$8,305.99
#2	12	\$7,500	8.25% (.0825)	3 years	K.	\$991.99	L.

# SHOPPING FOR AN AUTOMOBILE LOAN USING STANDARD CALCULATORS

	Total Points Earned
12	Total Points Possible
	Percentage

Name \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_

**Directions:** Calculate and complete the empty spaces labeled with letters in the tables below to compare different loan options by using a standard calculator. Each blank cell is worth 1 point.

## 3-year New Car Loan

	Principal Loan Amount	APR	Time Period	Monthly Payment	Interest Paid	Total Loan Amount
#1	\$15,000	3.99% (.0399)	3 years	A.	\$1,795.50	B.
#2	\$15,000	7.75% (.0775)	3 years	\$513.54	C.	D.

## 5-year New Car Loan

	Principal Loan Amount	APR	Time Period	Monthly Payment	Interest Paid	Total Loan Amount
#1	\$25,000	4.49% (.0449)	5 years	E.	F.	\$30,612.50
#2	\$25,000	6.50% (.0650)	5 years	\$552.08	G.	H.

## 3-year Used Car Loan

	Principal Loan Amount	APR	Time Period	Monthly Payment	Interest Paid	Total Loan Amount
#1	\$7,500	6.75% (.0675)	3 years	I.	J.	\$9,018.75
#2	\$7,500	8.25% (.0825)	3 years	K.	\$1,856.25	L.

# SHOPPING FOR AN AUTOMOBILE LOAN USING WEB SITE CALCULATORS

	Total Points Earned
35	Total Points Possible
	Percentage

Name\_\_\_\_\_

Date\_\_\_\_\_

Class\_\_\_\_\_

**Directions:** Choose an automobile to purchase. Record the year, type, and price below. Go to [www.bankrate.com](http://www.bankrate.com) to research auto loans. Compare five different lenders and complete the chart below. Answer the questions below the chart. Each cell is worth 1 point.

New or used, year, type, automobile price: (4 points)

Down payment (assume 10% of negotiated price): (1 point)

Principal loan amount: (1 point)

	Lender	APR	Time Period	Monthly Payment	Interest Paid
#1					
#2					
#3					
#4					
#5					

Choose and record the best loan option from above. (1 point)

List 3 reasons why the chosen loan would be the best option. (3 points)

# SHOPPING FOR AN AUTOMOBILE LOAN

## PURCHASING AN

Most people cannot afford to pay cash to purchase an automobile and will have to take out a loan. An **automobile loan** is borrowed money to purchase an automobile. The terms of the loan will vary depending on the source of the loan. Since an automobile is often a consumer's second most expensive purchase, after a home, it is important to understand the variables present in a loan agreement.



## TRUTH IN LENDING ACT

The **Truth in Lending Act** of 1968 is part of the Consumer Protection Act. It applies to all credit transactions including mortgages, automobiles, credit cards, loans, etc. It requires clear disclosure of key terms and all costs in lending agreements. This allows consumers to easily compare credit offers.

**Lenders must disclose:**

- ♦ The interest rate expressed as the APR;
- ♦ The total finance charge.

## LOAN VARIABLES

- ⇒ **Negotiated Price**—The price being paid for the automobile agreed upon by the seller and buyer.
- ⇒ **Down Payment**—The amount of money paid on the automobile at time of purchase, usually required.
- ⇒ **Trade-In**—The amount of money received for trading in an automobile. This amount is subtracted from the negotiated price of the automobile.
- ⇒ **Loan Amount**—The amount of the loan for the automobile after subtracting the down payment and/or trade-in price from the negotiated price of the automobile before adding interest and fees.
- ⇒ **Annual Percentage Rate (APR)**—Measure of the cost of credit on a yearly basis expressed as a percentage.
- ⇒ **Time Period**—The amount of time the loan will be repaid, usually expressed in months.
- ⇒ **Total Cost of the Loan**—The total of the principal loan amount, interest paid, and other fees.
- ⇒ **Total Purchasing Cost of Automobile**—The total of the down payment, trade-in, and total loan amount.

### ♦ Rules of Thumb for Loan Variables ♦

The larger the down payment and/or trade-in, the lower the principal.

The longer time period of the loan, the smaller the payments. However, more interest is paid.

The higher the APR, the more interest is paid and the larger total loan amount.

## WHERE TO GET LOANS

Lenders offer automobile loans to consumers. A **lender** is a large financial institution who offers loans to consumers. **Lender options** include auto dealers, commercial banks, savings and loans, credit unions, online lenders, life insurance policies, and auto insurance companies. Credit unions traditionally offer low APRs on auto loans. However, auto dealer financing might not be the best deal even though it may be the easiest.

Every variable of a loan needs to be compared to determine the best option for the consumer.

## LOANS FOR YOUNG ADULTS

A **cosigner** is a person who guarantees a loan for the original borrower. The cosigner becomes responsible for the debt if the original borrower defaults. A cosigner may be required if the consumer applying for a loan does not have a credit history or their credit rating is poor. The loan may be awarded with a cosigner because he/she has a good credit rating.

A **credit rating** is an evaluation of a person's credit history. It rates the person's creditworthiness based on many characteristics including repayment patterns, prior credit usage, credit history, and length of employment. For young adults, parents usually cosign the loan. Young adults usually do not receive individual loans because they have not had a chance to build a good credit rating.

## CALCULATING THE COST

### Financial Calculator:

*Students must have prior knowledge of financial calculators to calculate the loan costs.*

Payments per year = P/Y, Principal loan amount = PV, APR = I/Y, Time period = N

Enter P/Y, PV, I/Y, N into calculator to compute monthly payment (PMT).

*(The calculator will perform the correct equation.)*

Monthly payment \* Number of payments = Total loan amount

Total loan amount - Principal loan amount = Interest paid

Total loan amount + Down payment = Total purchasing cost

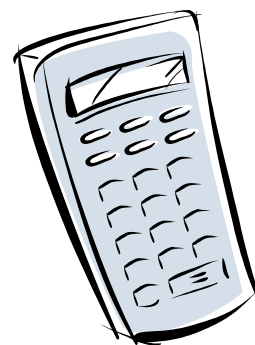
### Estimation with Standard Calculator:

*This method is quick and easy, but is just an estimation tool because it does not account for compounding interest. It can be used if a financial calculator is not available.*

Principal loan amount \* APR \* Time period = Interest paid

Interest paid + Principal loan amount = Total loan amount

Total loan amount / Number of payments = Monthly payment



## Automobile Loan Calculator Web sites

If a financial calculator is not available, many Web sites offer loan calculators:

Bank Rate: <http://www.bankrate.com/brm/calculators/autos.asp>

Loan Calculators: <http://www.loan-calculators.com/>

Yahoo! Auto Loan Center: <http://loan.yahoo.com/a/autocalc.html>

Edmunds Car Buying Guide: <http://www.edmunds.com/>